

ABSTRACT

THE ROLE OF PLATELET INDICES IN DIFFERENTIATING THE CAUSES OF THROMBOCYTOPENIA IN A TERTIARY CARE HOSPITAL

BACKGROUND:

Thrombocytopenia is defined as platelet counts below 1,50,000 cells/cu.mm, but they do not reveal the underlying pathology which could be either hypoproduktive or hyperdestruktive etiology. This study attempts to find the usefulness of these platelet indices in initial evaluation of patients with thrombocytopenia by assessing their variation in different clinical scenarios.

AIM:

1.To evaluate the variation in platelet indices in establishing clinical correlation in patients presenting with thrombocytopenia.

2.To study the relationship of platelet indices with respect to the underlying mechanism of thrombocytopenia.

MATERIALS & METHODS:

This is a prospective study conducted in Institute of Pathology for a period of 1.5 years on patients with thrombocytopenia. Blood samples from 250 thrombocytopenia patients are obtained in EDTA anticoagulated tube and platelet indices such as plateletcrit (PCT), platelet distribution width(PDW), mean platelet volume (MPV), platelet large cell ratio(P-LCR) and immature platelet fraction (IPF) were calculated and analysed.

RESULTS:

Of all the platelet indices analysed , platelet distribution width(PDW), mean platelet volume(MPV),platelet large cell ratio(P-LCR) and immature platelet fraction(IPF) were found to be useful in discriminating the cause for hypoproduktive and hyperdestruktive thrombocytopenia.

KEYWORDS:

Platelet indices, thrombocytopenia, hypoproduktive group, hyperdestruktive group.